TABLE 29

For companies that performed foreign R&D, domestic and foreign R&D paid for by the company and others and performed by the company, by type of R&D and selected industry: 2019

(Millions of U.S. dollars)

							Resea	Research (basic and applied)					Development					
industry	NAICS code	Total		Paid for by the company		Paid for by others	Total		Paid for by the company		Paid for by others	Total	Paid for by the company			Paid for		
				Total	ob	mestic R&I	perform	an	ce									
All industries	21-23, 31-33, 42-81	359,341		325,595		33,746	66,277		58,001		8,276	293,064		267,594		25,470		
Manufacturing industries	31-33	209,614		191,043		18,572	44,682		41,208		3,474	164,932		149,834		15,098		
Chemicals	325	65,887		63,703		2,184	22,029		21,473		556	43,858		42,230		1,628		
Pharmaceuticals and medicines	3254	59,464		57,637		1,826	19,626		19,419		207	39,838		38,218		1,619		
Other chemicals	other 325	6,423		6,065		358	2,403		2,053		350	4,020		4,012		9		
Computer and electronic products	334	76,515		69,012		7,503	11,361		9,905	i	1,456	65,154		59,107		6,047		
Semiconductor and other electronic components	3344	31,900	i	30,620	i	1,280	3,747	i	3,376	i	371	28,153	i	27,244	i	910		
Other computer and electronic products	other 334	44,615		38,392		6,223	7,614		6,529		1,085	37,001		31,863		5,138		
Nonmanufacturing industries	21-23, 42-81	149,727		134,552		15,174	i 21,594		16,792		4,802	128,132		117,760		10,373		
Information	51	94,642		94,184		458	7,852		7,715		137	86,791		86,469		321		
Software publishers	5112	30,216		29,778		438	2,539		2,411		128	27,677		27,367		310		
Other information	other 51	64,427		64,406		21	5,313		5,304		9	59,114		59,102		11		
Professional, scientific, and technical services	54	30,932		16,324		14,608	i 7,672		3,070		4,602	23,260	i	13,254	i	10,006		
Scientific research and development services	5417	14,174	i	456		13,718	i 4,237		161		4,076	9,936	i	295		9,641		
Other professional, scientific, and technical services	other 54	16,759		15,868		891	3,435		2,909		526	13,324	i	12,959	i	365		
,				Total	fc	reign R&D	performa	nc	e									
All industries	21-23, 31-33, 42-81	104,464		93,944		10,519	i 17,066		14,324		2,742	87,398		79,620		7,778		
Manufacturing industries	31-33	64,351		63,006		1,345	11,824		11,585		239	52,527		51,421		1,105		
Chemicals	325	18,568		18,323		245	4,650		4,595		55	13,918		13,728		190		
Pharmaceuticals and medicines	3254	15,868		15,654		214	4,033		4,001		31	11,835		11,652		183		
Other chemicals	other 325	2,700		2,669		31	617		594		24	2,083		2,076		7		
Computer and electronic products	334	25,452	i	24,940	i	512	3,132	i	3,052	i	80	22,320	i	21,888	i	432		
Semiconductor and other electronic components	3344	13,007	i	12,809	i	198	1,490	i	1,446	i	44	11,517	i	11,363	i	154		
Other computer and electronic products	other 334	12,445		12,131		314	1,642		1,606		36	10,803		10,525		278		
Nonmanufacturing industries	21-23, 42-81	40,113		30,939		9,175	i 5,242		2,740		2,503	34,871	i	28,199	i	6,672		
Information	51	19,051		19,002		48	1,614		1,599		14	17,437		17,403		34		
Software publishers	5112	6,949		6,901		48	754		740		14	6,195		6,161		34		

## TABLE 29

## For companies that performed foreign R&D, domestic and foreign R&D paid for by the company and others and performed by the company, by type of R&D and selected industry: 2019

(Millions of U.S. dollars)

								Research (basic and applied)						Development				t	
Industry	NAICS code	Total		Paid for I the compan	•	Paid fo	-	Total		Paid for by the company		Paid fo by others		Total		Paid for b the company		Paid for	- 1
Other information	other 51	12,102		12,101		*	i	859		859		*	i	11,242	i	11,242	i	*	П
Professional, scientific, and technical services	54	14,790		5,778		9,012	i	3,198		711		2,487		11,592	i	5,066	i	6,526	i
Scientific research and development services	5417	9,006	i	99		8,908	i	2,449	i	27	i	2,422	i	6,558	i	72		6,486	i
Other professional, scientific, and technical services	other 54	5,784		5,679		105		749		684		65		5,034	i	4,994	i	40	

<sup>\* =</sup> amount < \$500,000; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

## Note(s):

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates with estimates published for years prior to 2018.

## Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2019.